From glowbugs@theporch.com Mon Mar 18 19:45:09 1996

Return-Path: glowbugs@theporch.com

Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com (8.7.5/AUX-3.1.1) with SMTP id TAA24606; Mon, 18 Mar 1996 19:40:44 -0600 (CST)

Date: Mon, 18 Mar 1996 19:40:44 -0600 (CST)

Message-Id: <199603190140.TAA24606@uro.theporch.com>

Errors-To: ws4s@midtenn.net Reply-To: glowbugs@theporch.com Originator: glowbugs@theporch.com Sender: glowbugs@theporch.com

Precedence: bulk

From: glowbugs@theporch.com

To: Multiple recipients of list <glowbugs@theporch.com>

Subject: GLOWBUGS digest 134

X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com

Status: 0

## GLOWBUGS Digest 134

Topics covered in this issue include:

1) 1937 edt. of amateur radiotelephony
 by robert fowle <hammarlund@voyager.net>

2) 3579.545 tonight anyone? by rdkeys@csemail.cropsci.ncsu.edu

3) What kind of buffer amp for freqmeter vfo? by rdkeys@csemail.cropsci.ncsu.edu

4) Driver for xtal socket by Conard Murray <cfm@tntech.edu>

5) Re: What kind of buffer amp for freqmeter vfo? by rdkeys@csemail.cropsci.ncsu.edu

Date: Sun, 17 Mar 1996 21:11:08 -0500 (EST) From: robert fowle <a href="mailto:robert.net">hammarlund@voyager.net</a>>

To: boatanchors@theporch.com

Cc: glowbugs@theporch.com, ham-tech@netcom.com
Subject: 1937 edt. of amateur radiotelephony

Message-ID: <199603180211.VAA04236@vixa.voyager.net>

## greetings;

as the subject says, i have the 1937 edtion of amateur radiotelephony. would like to trade this for manuals i don't have. if interested, please e-mail list of what ya have available to trade. thanks

Robert Fowle

The HAMMARLUND Historian

Ph. voice or fax 517-789-6721

1215 Winifred

Jackson, Mich. 49202-1946

E-mail at: hammarlund@vixa.voyager.net

HAMMARLUND LITERETURE WANTED

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Date: Mon, 18 Mar 1996 13:44:20 -0500 (EST)

From: rdkeys@csemail.cropsci.ncsu.edu

To: glowbugs@theporch.com, boatanchors@theporch.com

Cc: rdkeys@csemail.cropsci.ncsu.edu ()
Subject: 3579.545 tonight anyone?

Message-ID: <9603181844.AA100681@csemail.cropsci.ncsu.edu>

Reminder..... QRG 3579.545 QTR 0300/0400/0500/0600UTC

Fires ye up yer bottleburners an' plys the ether....(:+}}.....

73/ZUT DE NA4G/Bob

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Date: Mon, 18 Mar 1996 13:50:15 -0500 (EST)

From: rdkeys@csemail.cropsci.ncsu.edu

To: glowbugs@theporch.com

Cc: rdkeys@csemail.cropsci.ncsu.edu ()

Subject: What kind of buffer amp for freqmeter vfo?

Message-ID: <9603181850.AA100697@csemail.cropsci.ncsu.edu>

I was playing around with a dead, cut up AN/URM-32 freq meter (last gasp of the BC-221). It sports a 5814A osc/cathode follower buffer, but does not quite have the poop to run Big Bertha Radiomarine in the xtal holder position. My suspicion is that an untuned 6AG7 or 6BH7 or some sort of pentode that might fit in a large 9 pin mini socket would work. That would make a mean vfo driver for almost any sort of breadboard project....(:+}}.....

How would other Globuggites do it? Just for discussion's sake?

73/ZUT DE NA4G/Bob

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Date: Mon, 18 Mar 1996 13:28:41 +0800 From: Conard Murray <cfm@tntech.edu>

To: Multiple recipients of list <glowbugs@theporch.com>

Subject: Driver for xtal socket

Message-ID: <01I2HHST5UKY91XPME@tntech.edu>

-- [ From: Conard Murray \* EMC. Ver #2.5.02 ] --

I imagine what 'ol Bob needs is some sort of untuned voltage amplifier but that depends entirely on the circuit in Bertha. If voltage gain is all that is necessary, then a small triode would work ok. If power is needed, then something along the 6AG7 would be a good choice.

One of the resistance-coupled amplifier designs from a mid-50's Handbook comes to mind if proper selection of bypass elements were chosen.

Everyone remember to join in the party on 3.579 on the hour...

ZUT!
de Conard ws4s

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Date: Mon, 18 Mar 1996 15:39:42 -0500 (EST)

From: rdkeys@csemail.cropsci.ncsu.edu
To: rtg@ee.duke.edu (Rhett T. George)

Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com

Subject: Re: What kind of buffer amp for freqmeter vfo? Message-ID: <9603182039.AA100868@csemail.cropsci.ncsu.edu>

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> - Bob -
> Hi, there. I think you are going after the right stuff in using a pentode
> buffer amp. The 6CL6 is a 9-pin with 7.5 W plate dissipation, the 6CM6
> has a max of 12 W. Either should do the job for Big Bertha. My guess is
> that you are running the osc at 1.8 MHz (whoops, 1.8mc/s) or 3.6. A
> pentode plate load of inductor paralleled with a resistor small enough
> to quench any tendency to oscillate at this stage gets my vote.
> Let us know what happens and how it works, please.
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> 73 Rhett - KE4HIH

Good, some discussion....

The Freqmeter oscillates at 160 meters, after downward padding, and the buffer is an untuned cathode follower. As-is, it will drive Big Bertha's xtal oscillator stage (an 807) with just sufficient drive to work straight through on 160 and get the full 200 watts out of the final. On doubling, it is way insufficient to drive at all, even if the xtal oscillator is still on 160 and I am using Bertha to double up from there. Thus, I need to up the drive by a factor of 3-10x to get sufficient voltage to drive Big Bertha's 807 xtal oscillator. So, some sort of standard small driver tube would be appropriate. For Globugging use, let's take the frame of reference that we need to use something that is cheap and not sought after so it can be picked up at hamfests for a buck or two..... The 6CL6 and the 6CM6 are commonly used, and that might mean that they would not be so easy to find. Any other tubes than the 6CL6 or 6CM6? For some reason, the 6CL6 has been getting harder to find lately. I was opting for something like a 6V6 or 6AG7, although there should be a very common 9 pin pentode or beam power tube, that is not so hard to find. Maybe something from the TV sets such as a 5xxx or such. I will have to finger through the RCA manual tonight and see what surfaces. I am trying to stay away from sweep tubes and tubes used commonly like the 6CL6 and 12BY7, because they are being eaten up at hamfests. There has gotta be a sleeper there that would be ideal for this kind of thing, and good for glowbugging.....

I found the 13EM7 in the TV style tubes that has a standard triode like a 6SN7 and a 10 watt triode companion. That is one of those ``sleepers'' from the TV era that could prove interesting to work with.... actually, even a class A 6SN7 untuned pair (two sections in series) might also work....

But, the chassis has a place for a 9 pin socket already (12AT7 sat there), so to keep chassis cutting to a minimum, something like a 6BQ5/E1-84 might work (although the audio types eat that one up).

So.... to continue the discussion, if you had to use an off the wall tube type, not commonly used in normal ham sets and thus likely to be found in the junk box at hamfests, what would ring the bells.....

Bob/NA4G				
End	of	GLOWBUGS	Digest	134

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